

**Job Description: Research Assistant**

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| **Faculty:** | ***FSE*** |
| **Department/Subject:** | ***Chemical Engineering*** |
| **Salary:** | **£30,497 to £34,304 per annum together with USS pension benefits** |
| **Hours of work:** | ***Full time – 35 hours per week*** |
| **Number of positions:** | ***1*** |
| **Contract:** | **This is a fixed term position for 1 year duration** |
| **Location:** | **This position will be based at Singleton Campus, Bay Campus, and/or Vale Europe Limited as required.** |

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| **Main Duties** | (Please list the Faculty / department specific responsibilities)   1. To cultivate microalgae in-line with the Project LightArc objectives. 2. To gather samples of algal biomass and analyse using appropriate methodologies to define productivity and cellular content. 3. To maintain and operate the algae nursery and provide quantities of algal biomass for use in the scale-up facility at Vale Europe Limited. |
|  | 1. Pro-actively contribute to and conduct research, including gather, prepare and analyse data, generate original ideas and present results. 2. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication. 3. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed 4. Interact positively and professionally with other collaborators and partners within the Faculty and elsewhere in the University and beyond as appropriate such as in industry/commerce, public organisations, and academia. 5. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile. 6. Keep informed of developments in the field in technical, specific and general terms and their wider implication for the discipline area, commercial applications and the knowledge economy. 7. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience. 8. Demonstrate and evidence own professional development, identifying development needs with reference to the Vitae Researcher Development Framework, particularly with regard to probation, PDR and participation in training events. 9. Maintain and enhance links with the professional institutions and other related bodies. 10. Observe best-practice protocols in maintenance and retention of research records as indicated by HEI and Research Councils records management guidance.  This includes ensuring project log-book records are deposited with the University/Principal Investigator on completion of the work. |
| **General Duties** | 1. To promote equality and diversity in working practices and maintain positive working relationships 2. To conduct the job role and all activities in accordance with safety, health and sustainability policies and management systems, in order to reduce risks and impacts arising from the work activity 3. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University’s Risk Management Policy. |
| **Person Specification** | **Essential criteria:**   1. A Degree in bioscience, bioengineering, chemical engineering or equivalent. 2. Evidence of the ability to actively engage in and contribute to writing and publishing research papers, particularly for refereed journals. 3. A demonstrable ability to conduct research in line with the objectives of the project. 4. Evidence of planning skills to contribute to the research project. 5. A demonstrable ability for the husbandry of microorganisms, particularly microalgae. 6. A background in chemical/biochemical analysis techniques appropriate to algae. 7. A commitment to continuous professional development   **Welsh Language:** *(Delete as applicable)*  Level 1 – ‘a little’ (you do not need to be able to speak any welsh to apply for this role)  *e.g. pronounce Welsh words, place names, department names. Able to answer the phone in Welsh (good morning / afternoon). Able to use of learn very basic every-day words and phrases (thank you, please, excuse me). Level 1 can be reached by completing a one-hour training course.*  For more information about the Welsh Language Levels please refer to the Welsh Language Skills Assessment web page, which is available [here](https://www.swansea.ac.uk/welsh-language-standards/compliance/recruitment/).  **Desirable Criteria**   1. A PhD in bioscience, bioengineering, chemical engineering or equivalent. 2. A background is safety and risk assessment preparation. 3. Exposure to industrial facilities, ideally operational experience on industrial facilities. 4. Completed passport to safety. |
| **Additional Information** | Project LightArc will deliver a revolution in carbon capture and reuse. Sponsored by the Department for Business, Energy & Industrial Strategy (CCUS Innovation 2.0), LightArc will use microalgae to convert raw end of pipe CO2 emissions into biomass without the need to pre-process the flue-gas. Biomass contains high-value-protein that can be formulated into animal feed and other products. This project will deploy a novel bioreactor system and scale-up to process up to 100tCO2 per day.  This is a collaborative research project between Swansea University, Vale Europe Limited (https://www.vale.com/), and Remediiate (https://www.remediiate.com/). |

  